# **Cross-Cutting Management Issues**

### **Construction Costs Trends**

Construction costs have been rising ahead of inflation costs for the past several years. WSDOT's Construction Cost Index (CCI) is prepared by compiling the most recent bid data, which reflects the prevailing market conditions. See the graph at the bottom of the page for WSDOT's CCI and the CCI of other nearby states and the Federal Highway Administration (FHWA). To view some of the most recent costs by quarter, see www.wsdot.wa.gov/biz/construction/constructioncosts.htm.

The eleven-year average growth rate of the CCI from 1990 through 2001 was 1.5% per year, but since 2001, the average growth rate has been 8.0% per year. During this period the CCI has been driven up by several factors, among them: the increasing worldwide demand for construction materials such as steel and cement; rising crude oil prices and other energy supply issues that have driven fuel prices up; and recent increases in costs in national and international construction activity, including (most recently) hurricane rebuilding in the South.

### A Competitive Bidding Market is WSDOT's Best Tool in an Inflationary Market

The best way to manage growing construction costs is to nurture a competetive bidding environment: the more qualified and responsible bidders, the better. The goal is to have three or more bidders per contract, when possible. On certain emergency contracts, such as the recent rockslides on I-90 through Snoqualmie Pass, WSDOT selects a prequalified contractor (based on type of work and location) in order to expedite the project. On some regular contracts, the location, type and size of the project reduces the number of interested bidders.

The following components (weighted as shown) are used to compute the CCI:

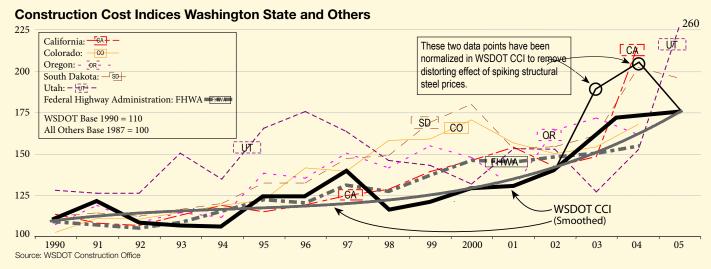
Concrete Pavement (3.2%) Steel Reinforcing Bar (5.4%)
Crushed Surfacing (7.9%) Structural Steel (6.9%)
Roadway Excavation (10.7%) Hot Mix Asphalt (48.5%)
Structural Concrete (17.4%)

For more information on what these materials are, see page 45 of the September 30, 2005 *Gray Notebook*.

To determine the level of competition for state highway construction contracts, WSDOT follows the trends in the number of bidders on every highway construction project, such as the total number of contractors bidding to be a prime contractor on WSDOT highway construction projects, and the total number of contractors winning the award of WSDOT highway construction projects. See the graphs on the next page.

In 2005, 435 contractors were prequalified to bid on WSDOT construction work. Of these, 137 contractors actually placed a bid to become a prime contractor, and 69 contractors won an award to be the prime contractor on a WSDOT project.

The percent of WSDOT contracts bid by at least three firms has been around 67% for six years, while the percent of WSDOT contracts bid by at least four firms has fallen from about 50% in 2002-03 (when work was scarce) to about 33% today (when work is abundant). The percent of WSDOT contracts bid by one firm has fluctuated from 7.7% (2001) to 13.4% (2004).



# **Cross-Cutting Management Issues**

### What WSDOT Can Influence...

Generally, WSDOT can influence the highway construction market in Washington State by making the agency a customer with whom contractors want to do business.

Fairness and efficiency. WSDOT strives to provide fair and efficient practices in contract administration and in risk allocation in the contracting relationship. Specifications on which contractors can confidently prepare bids, and a fair process for responding to questions and requests for clarification, are also key elements.

Communication with the contracting industry. The agency promotes current and future contract opportunities to the contracting community, and makes special outreach efforts on unusual or difficult projects.

Bid advertisement scheduling. WSDOT tries to schedule bid advertisements to promote competitive appetite. For example, the agency bids paving contracts early in the summer construction season, when few projects are going on.

### ...and What WSDOT Cannot Influence

There are many factors outside of WSDOT's control. The overall volume of public and private sector work seeking contractors – the demand for contractors' services – is one element of the market that WSDOT cannot exert any control over. Contractors' access to key subcontractors and sources of construction material is another, although WSDOT has been experimenting with early-buy contracts, which allow contractors to purchase construction materials as soon as possible to lock in current prices. Bonding and other capacity constraints are other uncontrollable factors that might affect a contractor's appetite for work.

#### **Recent Sticker Shock Stories from Across the Country**

*Alaska, November 2005.* The Ketchikan road job came in at 78% over the \$6 million estimate. This project had only one bidder.

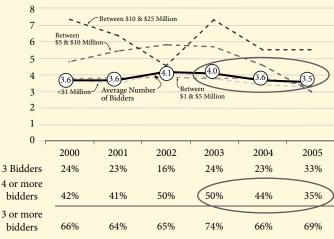
*New Jersey, December 2005.* The state rejected all three bids on the Rte. 52 Causeway Bridge project. The low bid was \$90 million over (60% over) the \$152 million estimate.

Florida, December 2005. FDOT has rejected more bids (9 out of 32) in the last month than ever before, and so far this financial year have received more single bids than in the past years. FDOT is calling a summit of stakeholders to discuss out of the box strategies.

## Number of Construction Firms Prequalifying for Bidding On, and Winning WSDOT Construction Contracts

Number of Bidders 450 400 Number Meeting Prequalification 350 (no data available before 2004) 300 250 Number Submitting One or More Bids to be Prime Contractor 200 150 Number Winning an Award as Prime Contractor 100 50 0 2000 2001 2003 2004 2005

#### Average Number of Bidders By Size of Contract



Source: WSDOT Construction Office

#### **Limited Number of Contractors**

Market trends in the construction industry towards consolidation and shrinkage of the number of local firms is another factor in construction costs. Acquisitions and mergers as far back as the early 1980's have reduced the number of contractors available to provide the work. Additionally, specialty areas in construction have a limited number of contractors. Such specialties include hot mix asphalt paving, roadway striping, shaft drilling, concrete pre-stressed structural elements, concrete post-tensioned structural elements, and steel fabrication.